

Claims:

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5 1. An apparatus for operating a food product molding machine of the type having a feed ram device receiving food product from a supply and transferring food product into a mold cavity of a mold plate in a fill position, which mold plate is
10 cycled in a linear reciprocal path defined by a return stroke to the fill position and an opposite discharge stroke to a discharge position, a product discharge device operable while the mold plate is held for a discharge dwell time in the discharge position to remove the product from the mold cavity, and a plate
shuttle supporting the mold plate for movement therewith along the linear mold path, the apparatus comprising:

(1) means for driving the plate shuttle to continuously cycle the mold plate in its reciprocal path;

15 (2) means responsive to a fill-on control signal for commencing forward movement of one of the rams and the feed of a moldable food product to the mold plate cavity ;

(3) means responsive to a fill-off control signal for terminating forward movement of said one ram and the feed of the food product to the mold cavity; and,

20 (4) means responsive to a discharge position signal for holding the mold plate for a selectively variable discharge dwell time.

2. The apparatus as set forth in claim 1 wherein said fill-on signal is generated during the return stroke.

3. The apparatus as set forth in claim 1 wherein said fill-off signal is generated during the discharge stroke.

4. The apparatus as set forth in claim 1 including means responsive to a fill position signal for holding the mold plate in the fill position for a selectively variable fill dwell time.

5. The apparatus as set forth in claim 1 wherein said feed ram device comprises a pair of alternately operable feed rams, and including:

B 5 means responsive to an end of ^a ram feed stroke signal for reversing ^{one of} said ~~one~~ rams and for commencing the feed stroke of the other ^{of said rams} ~~ram~~; and,

B B B delay means for holding ^a response ^{of the other of said rams} to said end of ^{ram} feed stroke signal until generation of the ^a next fill-off signal.

6. The apparatus as set forth in claim 4 including means for adjusting the discharge dwell time in response to a change in fill dwell time to maintain a constant mold plate cycle time.

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